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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,534	04/22/2004	Jeff Sheppard	60,680-801	7314

7590 08/18/2005

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EXAMINER

FLANIGAN, ALLEN J

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/829,534

Applicant(s)

SHEPPARD, JEFF

Examiner

Allen J. Flanigan

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 10 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9 and 11-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Claims 7 and 12 are objected to as containing awkward phrasing.

The wording of claims 7 and 12 is confusing (claim 7 recites "includes a sidewall from at an angle from a peripheral area"; claim 12 recites "wherein the mounting bracket plate of includes offset end portions"). Please clarify the wording of these claims.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 8, 10, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasano et al.

Sasano et al. shows an elongate side plate 300 (Figs. 3, 4) shaped at a first end to form a bracket portion that engages a header of the heat exchanger. As seen in Fig. 4, the cross section of the side plate is C-shaped and forms an opening at its end surrounded by the C-shaped end portion. A second member, bracket 400, has a central plate portion with an opening 417 that receives a mounting pin. Note that this plate portion extends towards the right as shown in the drawings to extend into and partially across the opening formed in the end of side plate 300 as shown in Figs. 3 and 5. Thus, the two-piece structure of Sasano et al. reads on the claimed structure, thus anticipating it.

Regarding claims 4 and 19, see Figs. 4 and 6, clearly showing that bracket 400 is thicker than the side plate. Regarding the “engagement members” of claim 5, note member 415 regarding the claimed “first engagement members”, and members 411, 412 regarding the second engagement members. Note that they are shown to be longer than member 415.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasano et al.

Sasano et al. disclose that bracket 400 and side plate 300 are brazed due to the presence of braze clad on the inner and outer surfaces of bracket 400. It is common in the art for automated brazing processes to rely on a clad layer to provide the fusible bonding metal, and often only one of the components being joined is clad with the braze layer to avoid excessive braze material being present at the joint. It is considered an obvious matter of design choice which of the two components 300, 400 of Sasano et al. bears the braze clad provided one of them provides the brazing material.

Regarding claim 21, although Sasano et al. do not expressly mention furnace brazing, braze clad parts are commonly used for automated assembly which typically employ a brazing furnace. The Examiner hereby takes official notice of the notorious nature of using a brazing furnace to braze assembled, braze clad components of heat exchangers, to the extent that citation of a reference is considered unnecessary. In re Malcolm et al, 54 U.S.P.Q. 235.

Claims 6, 7, 9, and 11-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining references show various heat exchanger brackets or end plate designs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Allen J. Flanigan  
Primary Examiner  
Art Unit 3753

AJF